

### REMARKS

By this amendment, claims 1-20 are pending, in which claims 18 and 19 are currently amended. No new matter is introduced.

The Office Action mailed June 25, 2007 rejected claims 1-20 under 35 U.S.C. § 112, second paragraph, as being indefinite, and claims 1-20 under 35 U.S.C. § 102 (b) as anticipated by *Shridhar et al.* (US 5,727,194).

### OBJECTIONS

Applicant has amended the Specification, including the Title, in response to the objections. With these amendments, it is believed that the Examiner's objections have been satisfactorily answered and a withdrawal of these objections by the Examiner is respectfully requested.

### REJECTION UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

The Examiner objects to the use of verbs with the suffix "able" in the claims and alleges that this makes the claims indefinite because these terms are "unsettle or relative" (Office Action of June 25, 2007-page 2). In particular, the Examiner cites MPEP § 2173.05 (d).

Applicant traverses this rejection as there is no reasonable basis for making the rejection. Initially, Applicant points out that MPEP § 2173.05 (d), cited by the Examiner as a basis for the rejection, relates to "Exemplary Claim Language ("for example," "such as"). There is no such exemplary language in the present claims and the Examiner has pointed to none.

With regard to the Examiner's problem with the use of verbs having an "able" suffix, it is clear that the addition of such suffix means that there is a capability of performing the action of the verb. That is, "executable" means that something is capable of being executed,

“interpretable” means that something is capable of being interpreted, etc. Such language might make the claims a bit broader in scope than, say, using the language “executed” and “interpreted” but breadth does not equate to indefiniteness. *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). If the Examiner has a problem with the breadth of the claims, that matter should be addressed by applying pertinent prior art and not by attacking the claims as being indefinite. Moreover, to say that a file is “interpretable” is more descriptive of the invention than the language of a “file is interpreted,” because the file may or may not be interpreted in any given case or set of circumstances, but the file is “interpretable” when need be. Similarly, the processing of an “executable” file is more accurate and more descriptive because the file may or may not be executed under a given circumstance but, rather, it is “executable” when it needs to be. The language is clear and the suffix “able” added to a verb does not, per se, make the present claims indefinite under 35 U.S.C. § 112, second paragraph.

The Examiner then cites specific examples of the claim language alleged to be indefinite.

The Examiner contends that it is “unclear” what is meant by “at least one recorded service processing event representing service processing activity that has transpired in the communication system.” In particular, the Examiner contends that it is “unclear” what kind of service processing activity that has transpired in the communication system and that it is “unclear” what kind of service processing event “applicant is talking about” The Examiner then questions the meaning of “general-purpose processing environment,” asking whether it is a CPU or something else. The Examiner also questions the meaning of “at least one memory space,” asking whether it is a bit, a register, a buffer, a file, a database or something else. Further, the Examiner states, “the essential structural cooperative relationships of the claimed elements are unclear or missing,” making the claims indefinite (see pages 2-3 of the Office Action of June 25, 2007).

Again, the Examiner's comments appear to go to breadth rather than indefiniteness of the claims. Applicant is not required to put specific examples of various elements into the claims when the prior art would appear to permit more generic terms. Accordingly, "service processing activity" is a general term to describe the type of activity that is taking place in the communication system and Applicant is not required to be more specific in the claims unless the Examiner can show such "service processing activity" in the prior art. Respectfully, if the Examiner would refer to the present specification, and this is by way of example only and should not in any way limit the scope of the claims, e.g., at paragraphs [0005]-[0008], the Examiner will see that such service activity that may be processed could be fixed fee services, connections to the communication network based on distances and/or duration of the connection, amount of data transferred during an activity, or the use of some special services, etc. So, again, merely by way of an example to help the Examiner understand the claim language, and in no way limiting the scope of the claims, "at least one recorded service processing event representing service processing activity that has transpired in the communication system" may be the recording of the length of a long distance telephone call that has transpired.

With regard to a "general-purpose processing environment," this is one of the preferred embodiments of the present invention. As explained, at paragraphs [0013]-[0015] of the specification, for example, conventional systems were required to extensively rewrite and test billing systems software whenever a new billable feature was added to the network. Therefore, Applicant developed a generic and readily extensible post-processing system to cooperatively function with communication systems. By employing such a "general-purpose processing environment," Applicant is able to create and manipulate service processing records in a communications network wherein a service processing record comprises instructions for interpreting the recorded data described in the record (see paragraph [0017]). As explained in

paragraph [0024], “In contrast to prior art record processing systems that use dedicated-purpose hardware and software, event records generated in accordance with the present invention may be handled by a **general-purpose post-processing system** that extracts the instructions from the service processing event records and then uses the instructions for processing the recorded events. Changes to billing function are created and distributed at the same time as service function. Therefore, billing function need not be maintained and tested separately from service functions. This results in faster implementation of new services in a communications network” (emphasis added).

In response to the Examiner’s question as to whether the “general-purpose processing environment,” is a CPU or something else, a CPU and/or other processing elements, in combination, may be used to set up such a “general-purpose processing environment,” but the important thing is that there is an extraction of instructions from the service processing event records and that these instructions are then used for processing the recorded events, these instructions overcoming the need of conventional systems to use dedicated hardware/software.

With regard to the meaning of “at least one memory space,” the Examiner asking whether it is a bit, a register, a buffer, a file, a database or something else, this memory space is any type of storage into which the at least one instruction may be loaded. If the instruction is small enough, a “bit” might be sufficient, but the important point is that the memory space is any storage element into which the instruction is loaded. This is a simple concept and would have been understood by those of ordinary skill in the art.

Finally, with regard to the Examiner’s concern about “the essential structural cooperative relationships of the claimed elements,” Applicant disagrees that there is anything “unclear or missing.” The Examiner is not clear as to what “cooperative relationships” are alleged to be missing. Taking claim 1 as exemplary, there is a clear cooperative and structural relationship

between the elements as the at least one general-purpose processing environment comprises at least one memory space and the at least one interpreter receives and parses an interpretable file generated by a communications system, loads the instruction into the memory space of the general-purpose processing environment, and processes the recorded service processing event in the interpretable file by executing the instruction loaded in the general-purpose processing environment. Thus, the claim clearly identifies the relationship between the general-purpose processing environment and the interpreter. While Applicant believes, and has shown, that there is a clear cooperative structural relationship between the claimed elements and steps, if the Examiner would kindly point out what, exactly, is deemed to be “unclear or missing,” Applicant would consider any reasonable suggestions the Examiner may have in amending the claims to put them in a form acceptable to the Examiner.

With regard to claims 2-4, the Examiner objects to the terms, “a persistently stored library of instructions” and “the persistently stored library.” The Examiner correctly observes that the term, “a persistently stored library of instructions” in claim 2 means “a persistently stored library of instructions,” i.e., the claim means what it says, and then alleges that this is somehow inconsistent with the “accepted meaning” as a “file or a register” (Office Action of June 25, 2007-page 3). Initially, Applicant questions the Examiner’s “accepted meaning” and challenges the Examiner to produce evidence that “a persistently stored library of instructions” has an “accepted meaning” of “file or register.” The claimed term means exactly what it says. That is, there is an existing, or continuing, or fixed (see paragraph [0008] referring to “...magnetic tapes or other forms of **persistent** storage” for the fixed, or semi-permanent nature of the storage) library, or collection, of instructions (see, e.g., Figure 4, element 420, and paragraphs [0065]-[0067]) from which necessary instructions may be derived. While this “library” may comprise, for example, files, or registers, or a database, etc., Applicant does not

wish to be limited by the Examiner's "accepted meaning," without evidence of such an "accepted meaning" for "a persistently stored library of instructions." Applicant finds nothing indefinite about the recitation of "a persistently stored library of instructions" and challenges the Examiner to show evidence as to why this claim term is allegedly indefinite. There is absolutely nothing about this term that would confuse artisans about the metes and bounds of the claimed invention, and, therefore, nothing indefinite within the meaning of 35 U.S.C. § 112, second paragraph.

As to claim 4, the Examiner asserts that it is unclear what is meant by "an indicator within the interpretable file," inquiring as to whether it is an address pointer or stack pointer, program counter, etc. While such indicator may, indeed, be a pointer as suggested by the Examiner, Applicant does not wish to be limited to any particular kind of pointer. As disclosed in the specification, e.g., paragraph [0066], and Figure 5, there are various methods by which code-let builder 416 may process various event collections and the designation for each method, including any necessary instructions, is depicted in Figure 5 as upload indicator 532. It is the indicator in the interpretable file, no matter what specific form that indicator may take, that causes the selective uploading of the instruction(s). Again, one of ordinary skill in the art would have understood the metes and bounds of the claimed invention from the language employed in claim 4 and there is nothing indefinite about it, even though it might not be as narrow in scope as the Examiner would like.

As to claim 18, the Examiner alleges that "the code-let" is unclear and lacks antecedent basis. Claim 18 has now been amended to depend from claim 17, providing the proper antecedent basis for "the code-let." As far as being unclear, Applicant disagrees since claim 17 itself defines the "code-let" as "comprising the session processing event record and at least one

instruction pertaining to how the session processing event record is to be processed by a record processor.”

With regard to claim 19, the Examiner alleges that it is “unclear” what is meant by “event bundler.” Moreover, the Examiner alleges that the first occurrence of “the session processing event record” lacks clear antecedent basis. Claim 19 has now been amended to depend from claim 17, providing the proper antecedent basis for “the session processing event record.” Moreover, the meaning of “event bundler” is clearly defined in Figure 4 and paragraph [0063] of the specification:

As shown in Figure 4, events 413 generated in the course of service processing are accumulated by **an event bundler 414. Event bundler 414 determines how to group events together, which events can be filtered out, and when a sufficient number of events have been accumulated to pass on to the next stage of processing** in the form of an event collection 415. An **event bundling policy 422** is a stored collection of rules or data that determines the behavior of **event bundler 414** (emphasis added).

Paragraph [0064] is also instructive in reciting that “[a]s controlled by event bundling policy 422, event bundler 414 may also send forth groups of events representing partial or multiple sessions.” Thus, it is clear that the “event bundler” determines what events to group together and then effects such grouping in accordance with the rules set forth by event bundling policy 422.

Accordingly, in view of the explanations above, the Examiner is respectfully requested to withdraw the rejection of claims 1-20 under 35 U.S.C. § 112, second paragraph.

REJECTION UNDER 35 U.S.C. § 102 (b)

Applicant traverses the rejection of claims 1-20 under 35 U.S.C. § 102 (b).

Independent claim 1 recites, *inter alia*, a “record processor for processing an interpretable file generated by a communications system.” Independent claim 5 recites, *inter alia*, a “record processor for processing an executable file created by a communications system to represent at least one service processing event indicating service processing activity that has occurred in the communications system.” Independent claim 6 recites, *inter alia*, a “method for processing of an executable file created by a communications network in the course of service processing, wherein the executable file comprises at least one service processing event.” Independent claim 7 recites, *inter alia*, a “record processor coupled to a communications network for processing an interpretable file generated by the communications network, the interpretable file comprising at least one service processing event recorded during service processing of the communications network.” Independent claim 11 recites, *inter alia*, a “method for processing an event record created by a communications network in the course of performing service processing, wherein the event record comprises at least one service processing event.” Independent claim 12 recites, *inter alia*, a “method, in a record processor including a storage and wherein the record processor processes a recorded service processing event from a communications network.” Independent claim 13 recites, *inter alia*, a “method of processing a record of events recorded during use of a communications network.” Independent claim 15 recites, *inter alia*, a “method of processing a record of one or more events recorded during use of a communications network.” Independent claim 17 recites, *inter alia*, a “service processor for controlling a communications network...the service processor comprising: at least one session processor that executes service logic related to at least one communication session and that generates at least one session processing event record pertaining to the communication session.” Independent claim 20 recites, *inter alia*, a “method for providing service processing records from a communication service processor to a record processor comprising: receiving at least one



service processing record from the communication service processor, the service processing record relating to an action that has been performed by the communication service processor.”

*Shridhar et al.*, by contrast, has no relevance to record processors and communication sessions and/or processing of events pertaining to communication sessions within a communications network. Rather, *Shridhar et al.* is concerned with digital signal processors (DSP) and methods for executing zero-overhead loops in DSPs. For this reason, alone, *Shridhar et al.* is not an anticipatory reference with regard to the instant claimed subject matter.

Moreover, taking claim 12 as exemplary, since this is the claim the Examiner chooses, at page 4 of the Office Action of June 25, 2007, the Examiner identifies, in *Shridhar et al.*, the computer system 100, including DSP 110 and microprocessor 106 as anticipating a “record processor.” The mere disclosure of a digital processor and a microprocessor is no indication that these elements are used in *Shridhar et al.* for processing records of the type claimed by Applicant. The Examiner also alleges that these elements process an “interpretable file” identified as element 120 in *Shridhar et al.* However, element 120 is shown in Figure 1 of the reference as an optional secondary memory, and described at column 1, line 36, as “a slow secondary memory 120 (such as a hard disk). . . .” A hard disk may, in general, hold interpretable files, but the hard disk, itself, is not an “interpretable file,” as claimed. More importantly, there is no indication in *Shridhar et al.* that hard disk 120 constitutes, or comprises, “interpretable files” and the Examiner has never said why the Examiner believes hard disk 120 of *Shridhar et al.* to be an “interpretable file,” as claimed. Thus, there is no *prima facie* case of anticipation established by the Examiner.

Further, the Examiner has identified an opcode and operand in *Shridhar et al.* as comprising, respectively, the claimed “event” and “service processing activity that has transpired in the communications system” (The latter term is not even part of claim 12 which the Examiner

has taken as exemplary of the claims). Applicant takes issue with such a comparison. An opcode is clearly not an “event” and an operand is clearly not a service processing activity that has transpired in the communications system and the Examiner’s wishing it so does not make it so. The Examiner is clearly engaging in prior art revisionism as *Shridhar et al.* contains none of the claimed elements and steps.

As a still further example of the deficiency of *Shridhar et al.*, each of the claims recites, in one form or another, that there is at least one instruction for processing a recorded service processing event in an interpretable file and that the recorded service processing event is processed by executing the instruction loaded in a general-purpose processing environment. While the Examiner points to column 7, line 9, of *Shridhar et al.* for a teaching of such an instruction, reference to that cited portion of the reference shows only a general instruction in a DSP instruction set that includes an opcode field and an operand field. However, there is absolutely no disclosure in this portion of *Shridhar et al.*, or in any portion of *Shridhar et al.*, indicative of using an instruction as claimed, viz., executing that instruction for processing a recorded service processing event in an interpretable file. *Shridhar et al.* is only concerned with providing zero-overhead loop circuitry wherein repeat loop circuitry is a circuit block within the DSP and coupled to the DSP’s fetch, decode, and execute stages 112, 114, and 116 (see column 6, lines 43-51). There is absolutely no disclosure in *Shridhar et al.* regarding the processing of records in a communications network using an interpretable file and processing a recorded service processing event by executing an instruction loaded into a general-purpose processing environment, as claimed. Other than citing various portions of *Shridhar et al.* that appear to have no resemblance to the instant claimed subject matter, the Examiner has not explained how the cited disparate portions of the reference are being read to comprise the instant claimed subject matter and, as such, no *prima facie* case of anticipation has been established.

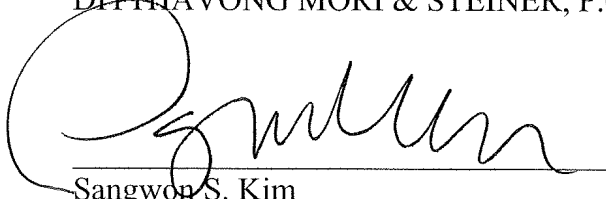
Accordingly, the Examiner is respectfully requested to withdraw the rejection of claims 1-20 under 35 U.S.C. § 102 (b).

Therefore, the present application, as amended, overcomes the objections and rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (703) 519-9952 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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